Strategies to Improve the Care of Patients with Diabetes and Vascular Disease

The University Of Best Practices Conference

Bruce D. McCarthy, M.D., M.P.H.
President, Physician Division
Columbia-St. Mary's
Ascension Health

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Allina Hospitals and Clinics

- Allina Medical Clinic
 - 700 providers (600 MDs)
 - 46 clinics
 - Clinic size: 4 to 80 providers
 - Twin Cities area: Urban, suburban, rural
- Allina hospitals
 - Twin Cities area: Urban, suburban, rural
- Home Care, Hospice & Palliative Care, Medical Transportation
- Epic EMR implementation 2004 2007

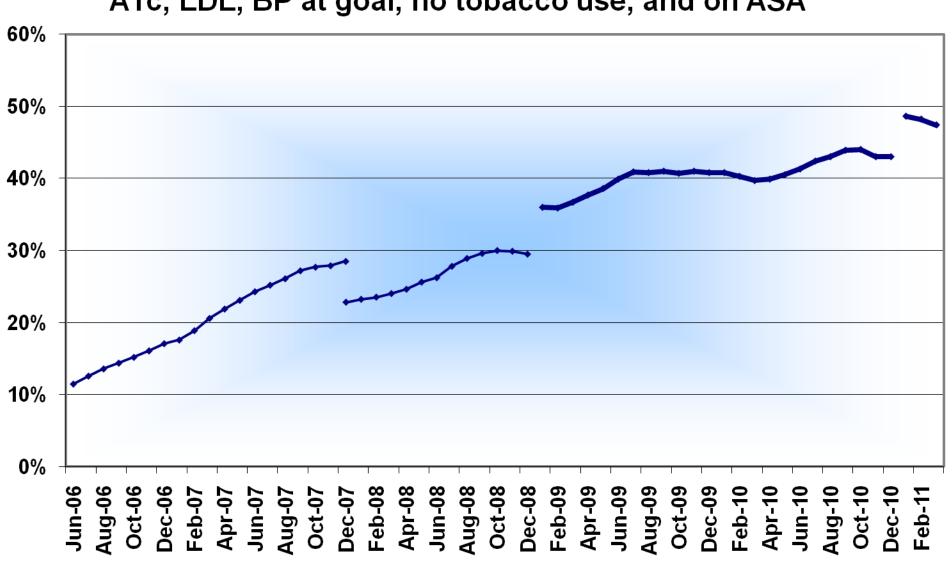
Allina Diabetes Population

18,500 patients, growing 5% per year

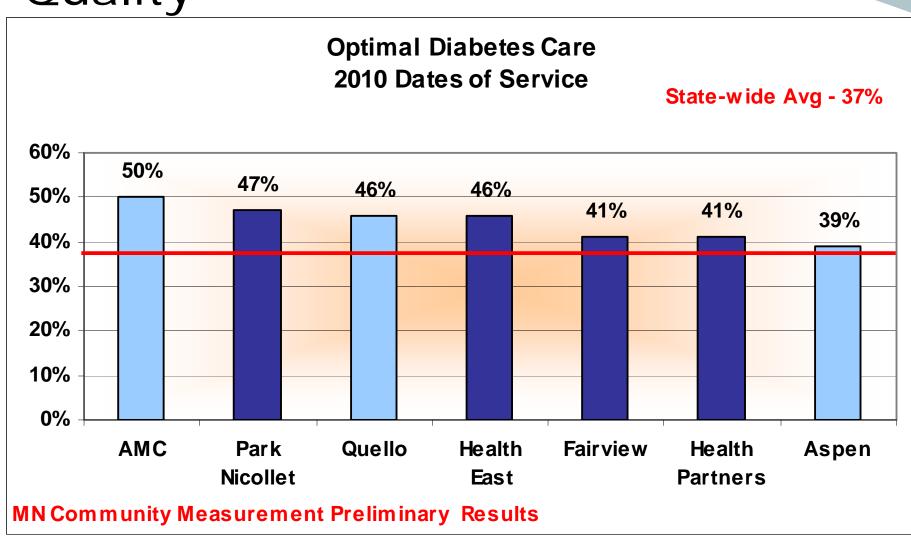
- Insurance Coverage
 - 21% Medicaid, Medicare/medicaid
 - 30% Medicare
 - 47% Commercial fee-for-service
 - 2% Charity Care (< 250% poverty level)

Continuous Improvement in Optimal **Diabetes Control 2006-2011**

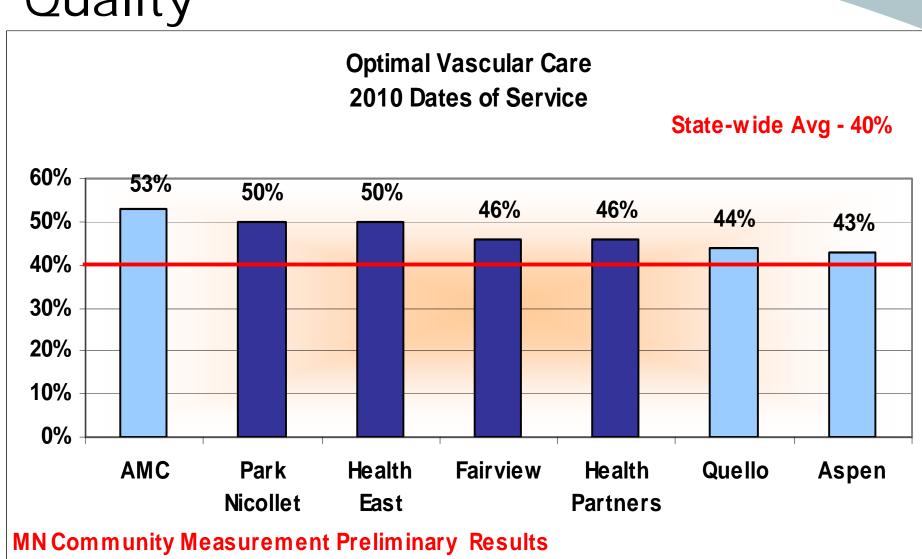
A1c, LDL, BP at goal, no tobacco use, and on ASA



Quality



Quality

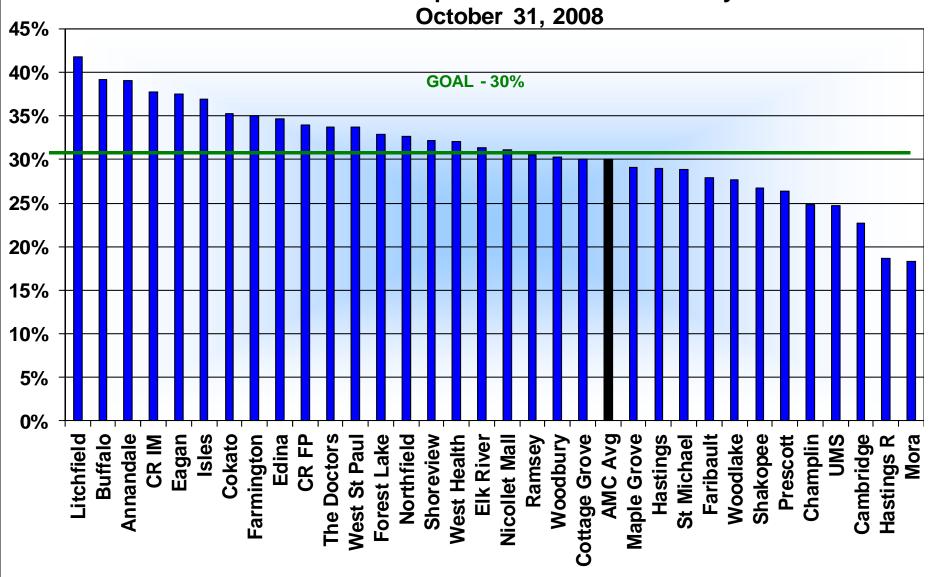


What has worked?

- ► Tools, Policies, Workflows
- **►**Leadership

Provide group feedback transparently

Allina Medical Clinic
% of Patients in Optimal Diabetes Control by Site
October 31, 2008



Provide individual feedback transparently

Unblinded results for each physician are shared at team meetings with all physicians and staff



Clinic Optimal Diabetes Care Report

The Report is for measurement period 10/1/2008 through 10/31/2008

Click here for report documentation



Run Date & Time: 11/5/08 & 7:49 am

Component ("optimal" care) measure of the percentage of adult patients who have type 1 or type 2 diabetes with optimally managed modifiable risk factors.

| Provider A | 45 | 68.9% | 66.7% | 66.7% | 75.6% | 100.0 | 35.6% |
|------------|-----|-------|-------|--------|--------|-------|-------|
| Provider B | 1 | 0.0% | 100.0 | 100.0% | 100.0% | 100.0 | 0.0% |
| Provider C | 10 | 60.0% | 60.0% | 70.0% | 80.0% | 100.0 | 40.0% |
| Provider D | 30 | 80.0% | 50.0% | 86.7% | 86.7% | 96.6% | 33.3% |
| Provider E | 60 | 80.0% | 85.0% | 80.0% | 86.7% | 100.0 | 51.7% |
| Provider F | 135 | 91.1% | 82.2% | 77.0% | 82.2% | 97.7% | 51.1% |
| Provider G | 61 | 72.1% | 57.4% | 63.9% | 83.6% | 100.0 | 21.3% |
| LOCATION X | 342 | 80.7% | 72.8% | 74.6% | 82.7% | 98.8% | 41.8% |



Provide patient level data that can be verified



Provider Optimal Diabetes Care Report

The Report is for measurement period 5/1/2008 through 5/31/2008

Click here for report documentation



Run Date & Time: 6/20/08 & 4:02 pm

Component ("optimal" care) measure of the percentage of adult patients who have type 1 or type 2 diabetes with optimally managed modifiable risk factors.

Dr. X - DXXXXXX

| Patient Name & MRN ID | <u>DOB</u> | <u>Recent</u> LDL | <u>Recent</u> LDL Val. | Recent BP Date | <u>Recent</u> Sys. BP | Recent Dias. BP | Recent A1c Dt | Recent A1c val | Tobacco Status | <u>ASA</u> Indicator | <u>Reg:</u> Status | Optimal Control (Y/N) |
|------------------------|------------|----------------------|---------------------------|-------------------|--------------------------|--------------------|------------------|-------------------|-------------------|-------------------------|-----------------------|--------------------------|
| | | <u>LDL</u> | LDL vai. | DI Dale | <u>оуз. ы</u> | Dias. Di | AICDI | A IC Val | <u>Status</u> | <u>mulcator</u> | <u>Status</u> | <u>(171V)</u> |
| Age 18-75 | | | | | | | | | | | | |
| Patient a - 1000000000 | 06/25/1970 | 3/3/08 | 9999999 | 3/3/08 | 122 | 74 | 3/3/08 | 7.2 | Never | Yes | Active | e No |
| Patient b - 1000000000 | 06/11/1949 | <u>2/25/08</u> | 132 | 4/24/08 | 112 | 62 2 | 2/25/08 | 10.2 | Quit | Yes | Not as | ssignedNo |
| Patient c - 1000000000 | 12/24/1950 | 1/28/08 | 94 | _ 1/28/08 | 124 | 72 ⁽ | | | Quit | Yes | Active | No |
| Patient d - 1000000000 | 06/18/194 | 12/13/06 | 67 | 2/22/08 | 108 | 6412 | 2/13/06 | 6.5 | Never | Yes | Active | Yes |
| Patient e - 1000000000 | 10/23/1964 | 3/25/08 | 102 | 3/25/08 | 118 | 78 3 | 3/25/08 | 7.1 | Never | Yes | Active | No |
| Patient f - 1000000000 | 10/19/1934 | 12/15/07 | 89 | 5/29/08 | 138 | 82 5 | /13/08 | 6.8 | Never | No | Active | No |

Do not refill DM medications if there has not been appropriate follow-up

- Limit Rx to a total supply of 6 Months
- •For refill requests, limit to 1 month supply and schedule an appointment
- •If no appt occurs and there is another refill request, limit to 1 week supply and schedule an appt

Prevent Clinical Inertia →Increase Tempo

- •Control of LDL results in a 10-15% reduction in MI/stroke/death within the first year! Baigent, et. al. Lancet 2005 Oct 8;366(9493):1267-78
- •There is simply too much to do in only 4 visits per year. Yarnal, et. Al. Am J Public Health. 2003 Apr;93(4):635-41
- •More appts correlates with better glycemic control O'Connor et. Al. J Fam Pract 1999 Apr;48(4):305

Increase Tempo

- Schedule "Planned Diabetes Visits"
- Schedule f/u in 4-6 wks if not controlled
- Make adjustments in office based on FBS > 130
- •Self-titrate insulin: "Increase lantus 2 units every 3 days until FBS consistently < 130"
- Use CDEs
- Order "direct LDL"
 - Direct LDL does not require fasting
 - Is more accurate (Hirany, et al., AJM, 1996)
 - Costs the patient less (roughly \$15-20 vs. \$20-40)

Plan the Diabetes Visit Workflow

- Previsit
 - Check schedule 10 days out and have pt come in prior to have A1c and LDL and microalbumin labs done
- Visit (Rooming Standards)
 - Check if patient is due for labs. Alert MD or order directly.
 - Order point-of-care A1c prior to seeing MD
 - Check BP according to stds, alert MD if above target (include BP assessment in MA eval)
 - Shoes off



Give patients written assessment and follow-up instructions

THE FACTS:

- 50% of patients leave the office visit not understanding what they were told by the physician. [Roter and Hall. Ann Rev Public Health 1989; 10:163]
- 50% of Patients, when asked to state how they were supposed to take a prescribed medication, did not understand how the physician had prescribed the medication. [Schillinger et all. Medication miscommunication, in Advances in Patient Safety (AHRQ, 2005)]

THE PLAN:

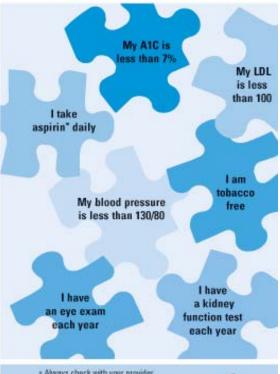
Provide patients with their results vs goals and follow-up instruction.

- Printed After Visit Summary (EPIC)
- Printed report card "Staying in Control"
- Schedule f/u appts BEFORE pt leaves



Staying in Control Putting the Pieces Together

You can stay healthy when you have diabetes IF you control the pieces of the puzzle. Make sure you have the necessary tests and know the rargets for these tests. Work with your doctor and health care team to keep each piece under control.



 Always check with your provider before starting aspirin use.



| Your Goal | Your Results | In Control |
|------------------------|--|------------------------------------|
| <7% | | |
| <100 | | |
| <130/80 | | |
| daily* | Y/N | |
| No | Y/N | |
| annually | Y/N | |
| annually | | |
| annually if A1c >8% | Y/N | |
| | Goal <7% <100 <130/80 daily* No annually annually annually if A1c >8% | Goal Results <7% |

* Always check with your provider before starting aspirin use.

Appointment

| Date | Time |
|----------|------|
| Provider | |
| Notes | |
| | |



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Teach MAs to "work" the roster

- Clean up data (died, transferred care, not diabetic)
- Call patients (or send letter) to schedule visits if
 6 mos, or if > 3 mos and î A1c/BP/LDL
- Check with PCP for patients with to see if pt should come in sooner if uncontrolled
- Order and schedule labs in advance of visit
- Manager collects rosters with notes from every
 MA at the end of each month



Provide patient level data that can be verified



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Utilize Certified Diabetes Educators (CDEs) to their fullest potential

- Medication management visits based on standing orders to titrate meds
- Advise MDs on suggested treatment changes
- "Activate" patients to work with MD to get to goal
- Coach individual physician/assistant teams based on chart reviews of their DM patients
- Co-visits for patients of struggling physicians

Create brief, practical, and pragmatic CME programs

- Strictly limit background to key evidence
- Focus on step-by-step management
- Focus on cost to patient
- Focus on key leverage areas: tempo, adherence, resistant hypertension
- Self-injection of saline using insulin pen
- Ensure attendance (bring to each clinic, "mandatory attendance", built into schedule for new PCPs on guarantee)

Part II. Leadership is Everything



First establish "what are we fighting for?"

- Lowering A1c to an average of 7% reduced risk of retinopathy by 76% and nephropathy by 50%.

 Diabetes Control and Complications Trial (DCCT)
- Lower is better. Each increment of 20mmHG in systolic BP or 10mmHG in diastolic BP doubles the risk of vascular disease across the entire BP range from 115/75 to 185/115.

Roccella E, Kaplan N. Interpretation and evaluation of clinical guidelines. In: *Hypertension Primer: The Essentials of High Blood Pressure:* 2003.pp.126-7

 Populations with an LDL below 100 have a 10 year coronary heart disease risk as much as 50% lower than populations with an LDL between 100 and 129.
 Framingham Heart Study



Comprehensive Medical Therapy for Patients with CHD or Other Atherosclerotic Vascular Disease

Reduction of Risk

| Aspirin20 | -30% |
|--------------------------------------|------|
|--------------------------------------|------|

Smoking Cessation 50%

Adapted from the AHA/ACC Guidelines 2001 and NCEP-ATP III2001



Execute a specific communication plan that includes the staff

- Craft simple, consistent, evidence-based messages that are meaningful and transmissible.
- Ask MDs to present to staff the "why" and what we are asking them to do
- Check that the message got through

Every physician and staff member should be able to articulate the "why".

Align Leadership

- Paired leadership
 - Administrative and clinical leaders have the same operational and clinical goals
- "Guiding coalition"
 - From different sites or within site opinion leaders
- Engage the power of nursing/MA staff



Establish the "moral high ground"

- Focus on the "why" 1
- Don't talk about "the numbers", talk about patients
- Use results of CDE chart reviews to persuade MDs that that while there really are some who won't comply, etc., there ARE some who need more aggressive care
- Review charts of DM patients admitted with AMI to look back at aggressiveness of care and use as case studies



Prove that systems can support practice and improve care

"Evidence-based Practice":

Pilot new workflows/policies or visit sites that already use them or check literature

"Consistency breeds reliability"



Tenaciously check that workflows and policies are reliably followed every time

Establish culture through action

"A policy not observed is much worse than no policy at all."

"Culture is everything you promote and everything you tolerate"



Teach Leaders to Lead

- Communicating the evidence and importance
- Leader rounding on staff
- Influencing skills
- Coaching skills for 1:1 meetings with physicians
- Dealing with Resistance

"All change eventually requires one clinician to talk to another about changing behavior."

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"A policy not observed is much worse than no policy at all."

